CLAIMS

1. A process for producing a soybean protein comprising treating a soybean protein solution or soybean protein slurry with transglutaminase, wherein a heat treatment is performed before or after the treatment with transglutaminase.

2. The process according to Claim 1, wherein the soybean protein slurry is an acid-precipitated slurry prepared by extracting defatted soybean milk from defatted soybeans with water and then subjecting the defatted soybean milk to isoelectric precipitation.

3. The process according to Claim 1, wherein the soybean protein solution is a soybean protein solution prepared by extracting defatted soybean milk from defatted soybeans with water, subjecting the defatted soybean milk to isoelectric precipitation, removing whey, and then neutralizing the remaining precipitate.

4. The process according to Claim 1, wherein the heat treatment is performed at 70 to 210°C for 1 second to 60 minutes before the treatment with transglutaminase.

5. The process according to Claim 1, wherein the heat treatment is performed at 100 to 200°C for 20 seconds to 80 seconds after the treatment with transglutaminase.

6. The process according to Claim 5, wherein transglutaminase acts to such an extent that the number of Glu-Lys bonds existing in 1 g of the soybean protein is 10^{10} to 10^{25} after the transglutaminase reaction.

7. A process for producing a processed meat food, which comprises mixing and molding the soybean protein produced by the process according to Claim 1 and a meat raw material, and then heating it.

8. The process for producing a processed meat food according to Claim 7, wherein a soybean protein, meat and water are blended and chopped, stuffed into a casing, and then heated.